

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(pursuant to NAC 445.42525)

**Permittee Name:** Bonnie Springs Ranch Inc.  
1 Gunfighter Lane  
Blue Diamond, NV 89004

**Permit Number:** NEV60031

**Permitted Facility:** Bonnie Springs Ranch Wastewater Treatment Facility

**Location:** Latitude: 36° 03' 38" N  
Longitude: 115° 26' 56" W  
Township 22S, Range 58 E, SW ¼ of Section 2

### **Drinking Water Protection Area / Wellhead Protection Area:**

The Bonnie Springs Ranch Wastewater Treatment Facility is within the 3000' but outside the 1000' Drinking Water Protection Area (DWPA) around the Bonnie Springs water supply well. The facility is not within an established Wellhead Protection Area (WPA).

### **General:**

Bonnie Springs Ranch Inc. operates an "old west" theme resort complex located 19 miles southwest of Las Vegas and 3 miles west northwest of Blue Diamond, Clark County, Nevada. The resort complex components that contribute wastewater to the treatment system include a restaurant and bar, restrooms, a 50-unit motel, and approximately 5 residences.

The domestic wastewater generated at Bonnie Springs Ranch resort is collected and flows by gravity through an 8 inch sewer main to a distribution box, then through a Palmer Bowlus flume in a utility box, and is ultimately discharged into the primary bentonite lined stabilization pond for treatment. Wastewater flows by gravity piping into pond two, which is Gunitite lined, for additional treatment and disposal via evaporation/percolation. A third unlined pond is available for additional disposal or storage capacity if needed.

o///

### **Receiving Water Characteristics:**

Groundwater below the site is monitored as a condition of the discharge permit. During the permit from July 2000 through December 2007, the average depth to groundwater was 6 feet 3 inches. Groundwater depth during that period ranged from a minimum of 3 feet to a maximum of 9 feet 10 inches. Reported groundwater water quality is listed below:

Parameter	Permit Limit	Average	Maximum	Minimum
Total Dissolved Solids (mg/l)	M&R	734.4	936	588
Total Nitrogen (mg/l)	M&R	6.47	11	0.22
Nitrate as N (mg/l)	10	5.45	9	<1
Chloride (mg/l)	M&R	73.2	140	<1
Depth to Groundwater (inches)	M&R	75.4	118	36

M & R = Monitor and Report

### **Effluent Flow and Characteristics:**

The wastewater treatment facility reported the following effluent flow and characteristics:

Parameter		Permit Limit	Average	Maximum	Minimum
Pond 1	Flow (MGD)	0.022	0.01246	0.01576	0.00936
	BOD5 (mg/l)	M&R	91.4	290	1.3
	BOD5 Loading (lbs/day)	43	9.88	31.7	<1
	Total Suspended Solids (mg/l)	M&R	222.6	566	7.9
	pH (Standard Units)	M&R	8.33	9.68	7.1
Pond 2	BOD5 (mg/l)	M&R	56.5	240	1.2
	Total Suspended Solids (mg/l)	M&R	256.6	722	7.9
	pH (Standard Units)	M&R	9.15	9.83	8.52

### **Proposed Effluent Limitations and Monitoring Requirements**

The following effluent limitations and monitoring requirements are proposed for the permit renewal:

PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30-Day Avg	Daily Maximum	Sample Location	Measurement Frequency	Sample Type
Flow (MGD)	0.022	M & R	Flume	Weekly	Discrete
BOD5 (mg/l)	---	M & R	Ponds 1 & 2	December & June	Discrete
BOD5 (lbs/day)	43*	---	Pond 1	December & June	Calculate
TSS (mg/l)	---	M & R	Ponds 1 & 2	December & June	Discrete
pH (Standard Units)	---	M & R	Ponds 1 & 2	December & June	Discrete

\* See Attachment A (calculation and chart); based upon .86 Ac X 50 lbs/ac-day

Groundwater quality samples shall be taken by the Permittee at the downgradient monitoring well #1 as specified below:

PARAMETER	GROUNDWATER LIMITATIONS	MONITORING REQUIREMENTS	
		Frequency	Sample Type
Depth to Groundwater (ft)	Monitor & Report	Quarterly	Measurement
Groundwater Elevation (ft AMSL)	Monitor & Report	Quarterly	Calculate
Nitrate as N (mg/l)	Monitor & Report	Quarterly	Discrete
Total Nitrogen as N (mg/l)	10.0	Quarterly	Discrete
Chlorides (mg/l)	Monitor & Report	Quarterly	Discrete
TDS (mg/l)	Monitor & Report	Quarterly	Discrete

**Schedule of Compliance:**

The Permittee shall implement and comply with the provisions of the Schedule of Compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the Schedule of Compliance.

- a. A revised Operations and Maintenance Manual (O&M) shall be submitted for review and approval by **MMM DD, 2008**.

**Rationale for Permit Requirements:**

Monitoring is required to assess the level of treatment being provided, to determine when design capacity is being approached, and to determine if the groundwater is being degraded.

**Procedures for Public Comment:**

The Notice of the Division's intent to renew a permit authorizing the facility to discharge secondary-treated effluent into groundwaters of the State, subject to the conditions contained within the permit is being sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. All written comments are to be hand-delivered, postmarked (via mail) or transmitted to the Division via fax or e-mail by **5:00 P.M. on MMM DD, 2008**.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination:**

The Division has made the tentative determination to renew the permit for a five (5) year period.

**Prepared by:** Janine O. Hartley  
Staff Engineer II  
Bureau of Water Pollution Control  
July, 2008